

What is claimed is:

1. An air intake assembly for use with a vehicle engine, the vehicle comprising a hood ledge panel forming a side wall of an engine room and a fender on the side of the hood ledge panel, the air intake assembly comprising:

    a reinforcement, situated between the fender and hood ledge panel and fixed to the upper and lower edges of the hood ledge panel, the hood ledge panel and reinforcement defining a substantially rectangular parallelopiped space,

    an air intake duct, whereof the edge part is fixed to the hood ledge panel, comprising an opening which communicates with the substantially rectangular parallelopiped space, and

    an opening of the reinforcement for connecting the substantially rectangular parallelopiped-shaped space with the space between the reinforcement and fender, the opening of the reinforcement facing the opening of the air intake duct.

2. The air intake assembly as defined in Claim 1, wherein the cross-sectional area of the opening of the reinforcement is larger than the cross-sectional area of the opening of the air intake duct.

3. The air intake assembly as defined in Claim 1, wherein tangent lines at the edge of the opening of the air intake duct constitute a conical surface and wherein the edge of the opening of the reinforcement is situated outside the conical surface.

4. The air intake assembly as defined in Claims 1, comprising an intake air guide part extending from the edge of the opening of the reinforcement to the side of the opening of the air intake duct.

5. The air intake assembly as defined in Claim 4, wherein the intake air

guide part of the reinforcement has a horn-rimmed shape.

6. The air intake assembly as defined in Claim 5, wherein the tip of the intake air duct has a horn-rimmed shape,

the opening of the air intake duct is in sufficient proximity to the opening of the reinforcement, and the tip of the air intake duct and the intake air guide part of the reinforcement function as a horn-shaped single air intake passage.

7. The air intake assembly as defined in Claim 4, wherein the air intake guide part of the reinforcement has a conical ring-shape.

8. The air intake assembly as defined in Claim 7, wherein the tip of the intake air duct has a horn-rimmed shape, and

a conical surface comprising tangent lines at the edge of the opening of the air intake duct effectively coincides with an inner conical surface of the conical ring-shaped air guide part.

9. The air intake assembly as defined in Claim 4, wherein the intake air guide part of the reinforcement has a cylindrical ring shape.

10. A method for manufacturing an air intake assembly for a vehicle engine, wherein the vehicle is provided with a hood ledge panel which forms a side wall of an engine room, a fender disposed to the side of the hood ledge panel and a reinforcement situated between the fender and the hood ledge panel, the hood ledge panel and reinforcement forming a substantially rectangular parallelopiped space,

the method of manufacturing the air intake assembly comprising:  
a step for fixing the edge part of the air intake duct to the hood ledge panel so that the opening of the air intake duct communicates with the substantially rectangular parallelopiped-shaped space, and

a step for providing an opening in the reinforcement, so that after

manufacturing the air intake assembly, the opening in the reinforcement connects the substantially rectangular parallelopiped space between the reinforcement and the hood ledge panel with the space between the reinforcement and the fender, wherein the step for providing the opening in the reinforcement comprises forming of an opening by blanking press using a stamping die.